



UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE
United States Patent and Trademark Office
Address: COMMISSIONER FOR PATENTS
P.O. Box 1450
Alexandria, Virginia 22313-1450
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/620,243	07/15/2003	Hans Jacobsen	JACO0002	8919

7590 07/20/2007
LAW OFFICES OF RONALD M. ANDERSON
Suite 507
600-108th Avenue N.E.
Bellevue, WA 98004

EXAMINER

SUHOL, DMITRY

ART UNIT	PAPER NUMBER
----------	--------------

3725

MAIL DATE	DELIVERY MODE
-----------	---------------

07/20/2007

PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

ED

Office Action Summary

Application No.

10/620,243

Applicant(s)

JACOBSEN, HANS

Examiner

Dmitry Suhol

Art Unit

3725

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --
Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 22 February 2007.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-36 and 47-52 is/are pending in the application.
- 4a) Of the above claim(s) 12, 14, 15, 17-24, 31, 33 and 35 is/are withdrawn from consideration.
- 5) ☒ Claim(s) 48 is/are allowed.
- 6) ☒ Claim(s) 1-10, 13, 16, 25-30, 32, 34, 36, 47 and 49-52 is/are rejected.
- 7) ☒ Claim(s) 11 is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
 Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
 Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08)
Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

Election/Restrictions

Claims 1 and 25 are **NOT** generic as they do not encompass features common to all presented species. Furthermore applicants have amended the claims to include limitations drawn to non-elected subject matter (see section ii), therefore such subject matter has NOT been examined and should be REMOVED from the claim as it is drawn to a non-elected invention in non-generic claim.

Claims 48, 49, 50 and 51 have been amended as to read on the elected species and have therefore been examined. Claims 12, 14-15, 17-24, 31, 33, 35 remain withdrawn by the examiner as being directed to a non-elected invention.

Claim Rejections - 35 USC § 112

The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

Claims 1-6, 13, 16, 25-30, 32, 34 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

Regarding claim 1, the Markush terminology used in the claim is improper due to the phrase "consisting essentially of" and renders the claim indefinite.

Regarding claim 30, it is unclear as to the number of hinge assemblies being claimed since the parent claim states "a hinge assembly disposed at each end" thus

implying that there may be a single assembly that is positioned at both ends, while claim 30 states "each hinge assembly" thereby implying that there is more than one such assembly.

Regarding claim 34, there is no antecedent basis for "said means".

Claim Rejections - 35 USC § 102

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

Claims 8-9 and 47, 49, 50-52 are rejected under 35 U.S.C. 102(b) as being anticipated by Kimura et al '334. Kimura discloses a bending die containing all of the claimed elements including, a work support/die (21) where each component is comprised of a sector gears (25) located on the ends of the work supports (figure 3) which in turn mesh with a linear racks (35) attached to the frame (figure 3, 4b, 4c). The frame member having a first section and second section (31) which is configured in a U-shaped (through member 34) and being adjustable through wedges (33).

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and

the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

Claims 1, 3, 5-6, 8-10, 13, 16, 25-26, 29-30, 32, 34, 36, 47, 49 are rejected under 35 U.S.C. 103(a) as being unpatentable over Takahashi et al '766 in view of Kimura et al '334. Takahashi discloses a bending die for sheet metal containing most of the claimed elements including, a first and second movable components (16, 18, 26, 28) having a planar work surface (surface top) each having an adjacent inner edges with a substantially fixed separation between the two regardless of rotational angular displacement (figures 5A-5C). A hinge assembly as required by claims 6, 29 is read onto the hinge between members 16 and 18 as it is present at both ends of the bending die. A resisting element as required by claims 13 and 34 is shown as hydraulic chamber 50 and associated parts. Limitations of claim 32 are shown in figure 2.

Kimura is relied upon to teach that it is known to provide movable components in a bending where each component is comprised of a sector gears (25) located on the ends of the work supports (figure 3) which in turn mesh with a linear racks (35) attached to the frame (figure 3, 4b, 4c). Therefore it would have been obvious to one having ordinary skill in the art, at the time of the claimed invention, to have provided sector gearing meshing with linear racks in place of members 26 and 28 on frame member 12, as taught by Kimura, for the purpose of providing a bending die with improved product accuracy at a relatively low production cost. With respect to claims 47, 49, 8 and 9, the claimed hinge assembly is considered to be encompassed by Takahashi's hinge (holding the work supports in operative connection) and sector gearing along with the linear rack of Kimura as incorporated into Takahashi for the reasons set forth above.

Claims 1, 2, 4, 25, 50-52 are rejected under 35 U.S.C. 103(a) as being unpatentable over Glud '841 in view of Kimura et al '334. Glud discloses a die for being sheet metal containing most of the claim elements including, a first and second movable components (arms 7, 8) having a working surface (read onto surfaces 13, 14) with inner edges (central portion of inner edges 17, 18), a frame (1, 3, 4), where it is considered that the separation between edges 17 and 18 encompasses the phrase "substantially fixed separation". A separation gap as required by claim 2 is shown in figure 2, while the adjustability of the device is encompassed by wedge members 6.

Kimura is relied upon to teach that it is known to provide movable components in a bending where each component is comprised of a sector gears (25) located on the ends of the work supports (figure 3) which in turn mesh with a linear racks (35) attached to the frame (figure 3, 4b, 4c). Therefore it would have been obvious to one having ordinary skill in the art, at the time of the claimed invention, to have provided sector gearing meshing with linear racks in place of members 4 and 9 on the frame member, as taught by Kimura, for the purpose of providing a bending die with improved product accuracy at a relatively low production cost.

Claims 7, 28 are rejected under 35 U.S.C. 103(a) as being unpatentable over Takahashi et al '766 and Kimura et al '334, as stated above, and further in view of Murai '385. Murai is relied upon to teach that it is known to provide a bending die like that of Takahashi with a spring (12) for the purpose of returning the working surfaces to their

Art Unit: 3725

original positions. Therefore it would have been obvious to incorporate a spring in the device of Takahashi for the reasons as taught by Murai.

Allowable Subject Matter

Claim 11 is objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

Claim 48 is allowed.

Response to Arguments

Applicant's arguments with respect to claims 1-36, 47-52 have been considered but are moot in view of the new ground(s) of rejection.

Conclusion

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Dmitry Suhol whose telephone number is 571-272-4430. The examiner can normally be reached on Mon - Friday 8:30am-5:00pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Derris Banks can be reached on (571) 272-4419. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Art Unit: 3725

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/Dmitry Suhol/
Primary Examiner
Art Unit 3725

ds